

NYSERNet & RIC/BOCES

Internet Project 2

Virtual
NYS Global Summit
May 24-28, 2010
for Educators seeking to
integrate technology &
21st century skills

PROJECT DESCRIPTION:

Grades 6-12

Any content area

- Virtual Global Summit to connect classrooms across the state of New York
- Address global issues with a local focus OR local issues that have global implications
- Integrate Internet2 resources and technologies
- Aligned to NY State, 21st Century and ISTE Standards

Global
summit
2010

Global 2010 summit



Internet² Project

PROJECT DESCRIPTION

This project is composed of two parts. The first part is done by each site that designs and runs an investigative or collaborative project. The second part of this project is the actual Virtual Global Summit. Students will present on their project to an audience made up of the larger Internet2 community. Each project presentation will be its own event within the larger summit day. Other schools will be able to either view the presentation or participate in the discussion portion of the presentation.

CLASSROOM PROJECT WORK

Students and teachers from participating location will develop a project which addresses issues that are important to both them and the broader world. Students will use Internet2/NYSERNET resources and any other resources they find appropriate to research important issues facing today's students in the global community, as well as connect with experts from around the world who are making a difference. Each of these projects will address global issues with a local focus OR local issues that have global implications. RIC/BOCES staff will provide support to the teachers and students in determining projects that will best match the goals of the summit and maximize the resources available. Each RIC/BOCES will determine how they will select the classroom from that region to participate.

GLOBAL SUMMIT PRESENTATION

Each classroom will then share their project during the Virtual Global Summit. These presentations will not only be informational, but will be purposefully designed to be interactive AND to have the participation of the other student groups build in some way on the work they have already done. A maximum of 8 sites can participate in this portion (one site from each region). It is hoped that these sites will work collaboratively with other sites either within or external to this group.

This portion of the project will be planned and coordinated by a state-wide team of students and teachers.

FRAMEWORK FOR THE SUMMIT

The final presentations of the projects will be done in a single day event (8-2) with each presentation (including questions and interactions) taking 50 minutes. This presentation will be open for others to participate as the students deem appropriate. The summit will be conducted during the week of May 24-28th.

Standards

ISTE Standards

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

Students create authentic learning products for the Global Summit.

ISTE a. apply existing knowledge to generate new ideas, products, or processes.

21st CENTURY SKILLS
Creativity & Innovation
Productivity & Accountability

NYS STANDARDS
ELA1.LR1: Listening & Reading
ELA1.SW2: Speaking & Writing
MST1: Analysis, Inquiry & Design
MST6: Interconnectedness

Students create multi-media presentations.

ISTE b. create original works as a means of personal or group expression.

21st CENTURY SKILLS
Creativity & Innovation
Communication & Collaboration
Media Literacy
Productivity & Accountability

NYS STANDARDS
ELA1.LR1: Listening & Reading
ELA1.SW2: Speaking & Writing
MST1: Analysis, Inquiry & Design
MST6: Interconnectedness

Students use Internet2 resources to gain expertise.

ISTE c. use models & simulations to explore complex systems & issues.

21st CENTURY SKILLS
Creativity & Innovation
ICT Literacy

NYS STANDARDS
MST1: Analysis, Inquiry & Design
MST6: Interconnectedness

Students are advocates for global issues.

ISTE d. identify trends and forecast possibilities.

21st CENTURY SKILLS
Information Literacy
Initiative & Self-Direction
NYS STANDARDS

CRITERIA FOR PROJECTS:

This criteria is not meant to stifle creativity or interesting projects. If a project does not meet a given criteria, but is believed to have merit, it should be submitted to the group for discussion. Each project will

- address global issues with a local focus OR local issues that have global implications;
- use numerous Internet2 resources and technologies are embedded and essential to the project;
- be develop by and appropriate for grades 6-12;
- align to state standards and 21st Century or ISTE standards;
- require collaboration with other classes, individuals or institutions
- be student designed and run. Teacher(s) is the facilitator of the work being done by the group(s);
- have clear essential question(s) and/or enduring understandings;
- investigate and collaborate to construct and share knowledge, ideas and information;
- develop a commercial to be ready by May 1st for the advertisement;
- develop presentations that will not only be informational, but will be purposefully designed to be interactive AND to have the participation of the other student groups build in some way on the work they have already done.

Sample Project Idea

Music Around the World

Create a global opportunity to perform musical selections with artists from around the world! Work with institutions such as Manhattan School of Music and/or other professional musicians in New York State. Various sites can use Internet2 connections to coordinate a collaborative performance during the Global Summit.

Beyond Earth

Take advantage of Internet2 connections with various observatories, such as Gemini, Mt Washington, and Johnson Ridge! Students can research scientific discoveries and the implications for their own future.

WHAT IS INTERNET2?

Internet2 is the foremost U.S. advanced networking consortium. Led by the research and education community since 1996, Internet2 promotes the missions of its members by providing both leading-edge network capabilities and unique partnership opportunities that together facilitate the development, deployment and use of revolutionary Internet technologies. By bringing research and academia together with technology leaders from industry, government and the international community, Internet2 promotes collaboration and innovation that has a fundamental impact on the future of the Internet. Internet2 is a not-for-profit advanced networking consortium comprising more than 200 U.S. universities in cooperation with 70 leading corporations, 45 government agencies, laboratories and other institutions of higher learning as well as over 50 international partner organizations.

INTERNET2 MISSION

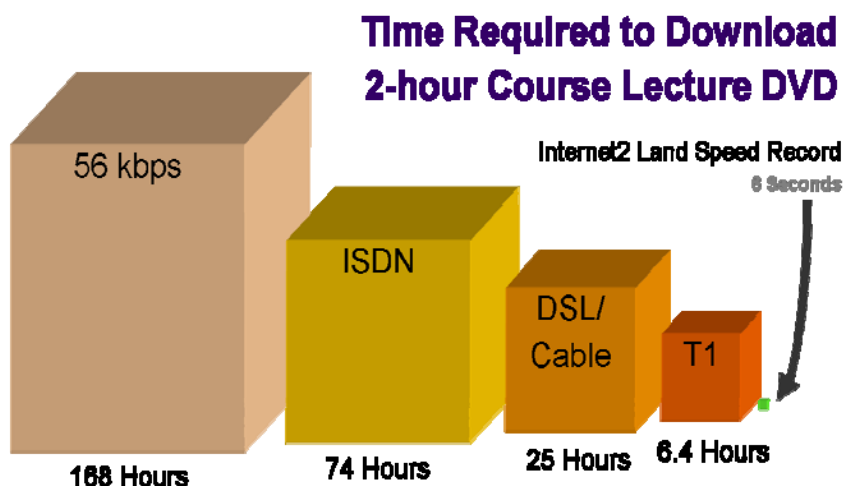
Develop and deploy advanced network applications and technologies, accelerating the creation of tomorrow's Internet.

INTERNET2 GOALS

- Enable new generation of applications
- Re-create leading edge Research & Education network capability
- Transfer technology and experience to the global production Internet

HOW IS INTERNET2 IMPACTING EDUCATION?

Internet2 members leverage the high-performance network and worldwide partnerships to support and enhance educational and research learning objectives. Beyond just providing network capacity, Internet2 actively engages learning communities in the development of important new technology including middleware, security, network research and performance measurement capabilities which are critical to the progress of the Internet.



Internet2 is not an upgrade to the Internet, it is a private network of computers connected to provide greater resource viewing options, as well as faster connection speeds.

PROJECT TIMELINE

The following timeline highlights the major activities outlined in the project description.

DATE	PROJECT ELEMENT
By Jan 20	Evaluation and identification of classrooms
By Feb 1	Finalize BROAD project titles and descriptions
By Feb 1	Hold the Date advertisement for Global Summit
Feb –Apr 30	Project Work
By Feb 5	First meeting of the Global Summit Planning Team (Planning Team)
By Feb 23	Layout of the Global Summit and projects described (Planning Team)
By March 1	Advertise Global Summit date with process for signing up to <i>1) Interactive viewing site OR 2) View classroom</i>
By March 15	Full packet of resources for the Summit developed (Planning Team)
By April 15	Preliminary presentation outline submitted to Global Summit Planning team (with needs for presentation and expected interactive component identified)
By April 25	Full Summit Schedule with identified individuals to do each piece of work (Planning Team)
By May 1	Full packet for Summit completed including evaluation, full schedule with descriptions, help sheets for technical contacts, suggestions for how to integrate into classroom prior for participating classroom teachers, etc
By May 1	Testing with all Interacting and presenting sites completed (Planning Team)
By May 1	Deadline to sign-up for being an <i>1)Interactive viewing site</i>
By May 1	Have commercials and distribute for advertisement
By May 10	Finalized Presentations submitted to Global Summit Planning Team
By May 15	Deadline to sign-up as a <i>2) Viewing classroom</i>
May 18	Full dry run of day (Planning Team)
May 24-28	Summit Date
By June 10	All follow-up evaluations and interviews

Sample Project Idea

Finding Truth in the Media

Connect with Media Literacy experts to investigate how the media portrayal of current and/or historical events influences cultures. By researching and accessing a variety of Internet2 resources, students can develop in-depth reports which compare various media sources and identify biases and the possible causes for them.

ISTE Standards

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

Students develop connections with experts and create multimedia presentations to report out on their learning.

ISTE a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

ISTE b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

21st CENTURY SKILLS

Creativity & Innovation
Communication & Collaboration
ICT Literacy

NYS STANDARDS

ELA1.LR1: Listening & Reading
ELA1.SW2: Speaking & Writing
MST1: Analysis, Inquiry & Design
MST5: Technology

Student teams will identify global issues and create original works which advocate solutions.

ISTE c. use models and simulations to explore complex systems and issues.

ISTE d. contribute to project teams to produce original works or solve problems.

21st CENTURY SKILLS

Communication & Collaboration
Flexibility & Adaptability
Initiative & Self-Direction
Creativity & Innovation
ICT Literacy
Social & Cross-Cultural Skills

NYS STANDARDS

ELA1.LR1: Listening & Reading
ELA1.SW2: Speaking & Writing
MST1: Analysis, Inquiry & Design
MST5: Technology
MST6: Interconnectedness:

SAMPLE PROJECT

Biodiversity and the evolutionary history of organisms.

New York State Standards

Level: Intermediate (6-8) **New York State learning Standard:** MST

Area: Science **Content Standard:** 4 **Area of Study:** Living Environment

Key Idea 3: Individual organisms and species change over time.

Key Idea 6: Plants and animals depend on each other and their physical environment.

Key Idea 7: Human decisions and activities have had a profound impact on the physical and living environment.

National Standards

Level: Intermediate (7-8) **Area:** Science **Content Standard:** C

POPULATIONS AND ECOSYSTEMS

A population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.

Populations of organisms can be categorized by the function they serve in an ecosystem.

Plants and some micro-organisms are producers--they make their own food. All animals, including humans, are consumers, which obtain food by eating other organisms. Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem.

PURPOSE

To assess students' ability to define key components of a community, understand the interrelationships found in a community, and to value communities that are part of their everyday lives.

GOALS: Students will be...

- Identify an organism that is missing from the phylogenic tree on Tolweb.org;
- Compile and analyze research conducted using Internet2 resources;
- Contribute to the Tolweb.org website by authoring a page;
- Present the learning products at the Global Summit.

ENDURING UNDERSTANDING

- Communities serve many different functions in students' everyday lives.
- Humans are interconnected with the environment for their actions effect and shape the community.
- Human decisions have a profound impact on the physical and living environment.

ESSENTIAL QUESTION

- How do living things change over time to become a new species?
- How do living things and non-living things interact in an environment?
- How are humans dependent on their communities?
- What decisions or activities have had a profound impact on the community?

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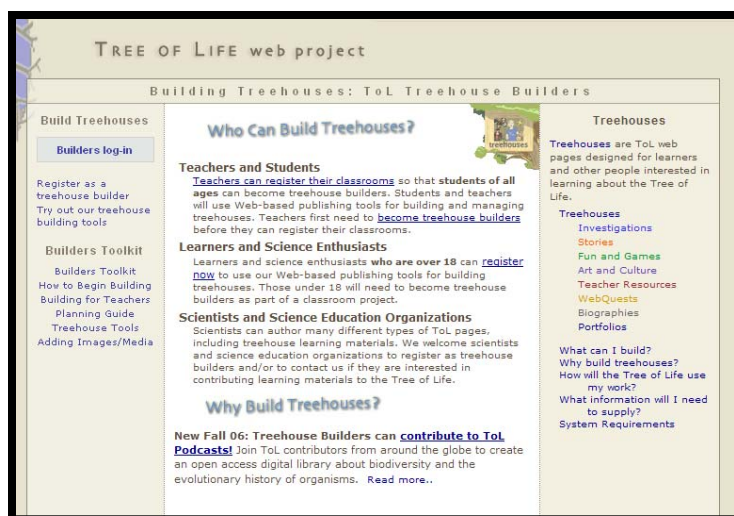


Summary of the Project:

The Tree of Life Web Project (www.tolweb.org) is based on the scientific inquiry process that provides students with an opportunity to build on their prior knowledge, reflect on their practice as young scientists, and publish their results. This will allow students to forge connections between science, literacy and technology learning. Through the creation of their own online page, the final product promotes student writing and scientific inquiry, as well as cultivates students' technology skills using media and online resources.

During the Project Integration in the classroom, students will be able to complete the following learning tasks:

- 1) **INTRODUCTORY ACTIVITY:** Creating your family tree SHOW & TELL
- 2) **BUILDING BACKGROUND KNOWLEDGE:** Learning about the Tree of Life science content in class (could use videos resources, etc.) & rainforest/deforestation/etc.
- 3) **STUDENT LEARNING PROJECTS:** Students will create/contribute to a page on the Tree of Life site that will be published online. Students could be assigned or choose organisms that have not yet been included on the Tree of Life website.



4) ADDITIONAL PROJECTS/EXTENSION ACTIVITIES:

- create an online virtual poster (Gloster EDU)
- create a commercial (could be a multicast on the NYSErNet network to promote Global Summit)

5) **GLOBAL SUMMIT PRESENTATION:** Students will present on new species and the impact of human decisions and activities on different communities at the global summit.

During the Global Summit, students should also be able to discuss and present basic information about the Tree of Life Biology Project, including:

- How you can browse the ToL to learn about biodiversity using the ToL website
- How you can find information and media on a specific organism.
- How teachers and learners can contribute pages to the ToL.
- A quick demonstration of how to use the ToL Treehouse Editor.
- What phylogeny is and how you can use the ToL to learn about Phylogeny.

ISTE Standards

3. Research and Information Fluency
Students apply digital tools to gather, evaluate, and use information.

Students collect and analyze resources to problem solve global issues.

ISTE b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

ISTE c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

21st CENTURY SKILLS

Productivity & Accountability

ICT Literacy

Communication & Collaboration

Information Literacy

NYS STANDARDS

ELA1.LR1: Listening & Reading

ELA1.SW2: Speaking & Writing

MST1: Analysis, Inquiry & Design

MST2: Information Systems

MST5: Technology

4. Critical Thinking & Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions.

Students identify real-life issues and develop practical solutions based on research and expert connections.

ISTE a. identify and define authentic problems and significant questions for investigation.

ISTE c. collect and analyze data to identify solutions and/or make informed decisions.

ISTE d. use multiple processes and diverse perspectives to explore alternative solutions.

21st CENTURY SKILLS

Critical Thinking & Problem Solving

Communication & Collaboration

Media Literacy

Flexibility & Adaptability

Social & Cross-Cultural Skills

NYS STANDARDS

ELA1.LR1: Listening & Reading

ELA1.SW2: Speaking & Writing

MST1: Analysis, Inquiry & Design

MST6: Interconnectedness

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Sample Project Idea

Energy Source Development

Are your students interested in solving the world's energy crisis? Current drilling and pipeline processes, especially hydrofracture drilling, introduce harmful chemicals into wells and underground waterways. Investigate the cost/benefit of new energy solutions, including health, land use, and toxic waste potentials. Using Internet2 resources and connections to national experts, your students could develop the next new energy source!

One Earth—yours, mine or ours?

Using remote enabled equipment like underwater submersibles and electron microscopes, discover first hand the impacts of global warming. Students can write reports on the effects of global warming and create public service announcements that propose solutions for action!

World Immigration

Ripped from the headlines... *What stand should the US take on illegal immigrants?* Engage in authentic conversations with classrooms and experts from around the world related to cultural understanding. During the Global Summit, students will report out on the issues and solutions based on their experiences.

ROLES & RESPONSIBILITIES

Each BOCES/RIC Service will:

- Identify a RIC/Model Schools/Distance Learning liaison for the global summit project, and provide support to the classroom participants;
- Work with NYSERNet to identify relevant Internet2 resources to support in-class projects and work with districts to help with implementation in project;
- Provide on-going support for classrooms;
- Work with other participating RICS to plan and coordinate presentations of projects to other participating classrooms;
- Coordinate with the local technical/ Distance Learning people to ensure that project is appropriate;
- Coordinate with NYSERNet in timely manner to ensure that the Internet2 resources are available for sites;
- Ensure CIPA compliance and video permissions;
- Help facilitate the Virtual Global Summit;
- Coordinate and facilitate the Global Summit Planning Team.

Each Global Summit Project will:

- Involve teacher(s) in the planning process;
- Create a project that meets the requirements;
- Work with the RIC and NYSERNet to incorporate Internet2 resources into classroom project;
- Create a commercial and additional advertising for their project;
- Create a presentation to share with others about the project;
- Regular video updates;
- Teacher needs to ensure that all appropriate AUP and other policy items are addressed;
- Share presentation at the Virtual Global Summit;
- Provide 1-2 students to be a part of the Global Summit Planning Team.

NYSERNet (Internet2 Provider) Responsibility

- Provide support to the RIC Coordinators and other project participants;
- Identify relevant Internet2 resources to support in-class projects;
- Arrange introductions with Internet2 resource sites and provide a seamless transition to the RIC Coordinator and other project participants. NYSERNet will stay involved as much as is deemed necessary or appropriate;
- Provide on-going support for utilization of Internet2 resources;
- Coordinate bi-weekly status updates throughout project period between the various RICs and participants.

Global Summit Planning Team: Comprised of 2 RIC representatives, at least 1 of the teachers and 1-2 students from each classroom. This team will

- take care of the design, planning, coordination and running of the Global Summit;
- develop and maintain the Global Summit site which will involve/include all information and links to appropriate interactive components;
- facilitate the Global Summit day with each set of students introducing and closing the presentations.

ISTE Standards

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Students develop empathy for global issues and make a life long commitment to make informed decisions about the planet.

ISTE a. advocate and practice safe, legal, and responsible use of information and technology.
ISTE c. demonstrate personal responsibility for lifelong learning.

21st CENTURY SKILLS

ICT Literacy

Initiative & Self-Direction

Social & Cross-Cultural Skills

Leadership & Responsibility

NYS STANDARDS

ELA1.LR1: Listening & Reading

ELA1.SW2: Speaking & Writing

MST1: Analysis, Inquiry & Design

MST6: Interconnectedness

6. Technology Operations & Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

Students are able to navigate I2 resources and use technology to share knowledge.

ISTE a. understand & use technology
ISTE b. select and use applications effectively and productively
ISTE d. transfer current knowledge to learning of new technologies

21st CENTURY SKILLS

Creativity & Innovation

Communication & Collaboration

Media Literacy

Initiative & Self-Direction

ICT Literacy

Productivity & Accountability

NYS STANDARDS

ELA1.LR1: Listening & Reading

ELA1.SW2: Speaking & Writing

MST1: Analysis, Inquiry & Design

MST2: Information Systems

MST5: Technology

MST6: Interconnectedness: Common Themes



QUESTIONS TO ASK FOR CLASSROOM PARTICIPATION

Teacher

Have you had prior experience engaging in a videoconference for PD? **YES or NO**

Have you had prior experience with videoconference in your classroom? **YES or NO**

How do you expect this Internet 2 experience to align to your learning goals? **YES or NO**

What do you want as your learning “take-away”?

What do you want as your students’ learning “take-away”?

What other instructional technologies do you regularly use in your classroom?

Administrator

How would this Internet 2 experience align with your building’s instructional goals?

Do your district/building policies regarding teacher/student access to various Internet tools, sharing of work, & digital safety align to the goals and activities as defined in this project? **YES or NO**

How might you plan to use Internet 2 technology in your building in the future?

Network Administrator

Does your district participate in your local BOCES Distance Learning Program and have access to Internet 2? **YES or NO**

Does the teacher have relatively easy access to Internet 2? **YES or NO**

If so, in what exact location?

Does the teacher have access to technology? (list other kinds of necessary technology here such as Web 2.0 tools, download digital video, digital cameras, etc.)

Do the students have access to email? **YES or NO**

ADDITIONAL INFORMATION & PLANNING NOTES:

Global summit 2010



CONTACT INFORMATION:

Broome-Tioga BOCES/South Central RIC

Point of Contact: Katie Bertrand
Manager, Educational Resource Services
Phone: 607-766-3730
Email: kbertran@btboces.org

Central New York RIC

Point of Contact: Amy Spath
Coordinator of E-Learning & Special Projects
Phone: 315-433-8332
email: aspath@cnyric.org

Eastern Suffolk RIC

Point of Contact: Darlene Roces
Administrator Coordinator
Phone: 631-288-9568
email: DRoces@esboces.org

Erie1 BOCES/WNYRIC

Point of Contact: Michelle Okal
Manager, Instructional Technology
Phone: 716-821-7200
email: mokal@e1b.org

Point of Contact: Jenny Conklin-Frank
Staff & Curriculum Development Coordinator
Phone: 716-821-7064
email: jconklin@e1b.org

Greater-Southern-Tier BOCES

Point of Contact: René Charles Carver
Distance Learning Coordinator
Phone: 607-795-5350 x1799
email: rcarver@gstboces.org

Mohawk RIC

Point of Contact: Tracy Rowlands
Assistant Director for Instruction
Phone: 315-361-2813
email: trowlands@moric.org

Point of Contact: Heather Cauffman

Instructional Team Leader
Phone: 315-271-5540
email: Hcauffman@moric.org

Monroe #1 RIC

Point of Contact: Jeremiah Frink
Director of eLearning Services
Office: 585-383-2241
Direct line: 585-383-6620
email: jeremiah_frink@boces.monroe.edu

Northeastern RIC (NERIC)

Point of Contact: Mike Sylofski
Manager, eLearning Technologies
Phone: 518-862-5499
email: msylofsk@gw.neric.org